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BEFORE THE ARIZONA CORPORATION

IN THE MATTER OF THE APPLICATION )  
OF STARWOOD SOLAR I, L.L.C., IN ) DOCKET NO.  
CONFORMANCE WITH THE REQUIREMENTS) L-00000MM-09-0446-00150  
OF ARIZONA REVISED STATUTES )  
§§ 40-360, et seq., FOR A )  
CERTIFICATE OF ENVIRONMENTAL ) CASE NO. 150  
COMPATIBILITY AUTHORIZING )  
CONSTRUCTION OF A 290 TO 365 )  
MEGAWATT SOLAR THERMAL POWER )  
PROJECT AND A 500KV TRANSMISSION )  
LINE ORIGINATING AT THE PLANNED )  
STARWOOD SOLAR I SUBSTATION TO )  
THE PLANNED AND PERMITTED DELANY )  
SUBSTATION AND INCLUDING A 500KV )  
TRANSMISSION LINE FROM THE )  
PROPOSED STARWOOD SOLAR I )  
SUBSTATION TO THE EXISTING )  
HARQUAHALA GENERATING STATION )  
SWITCHYARD IN MARICOPA COUNTY, )  
ARIZONA. ) OPEN MEETING

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ORIGINAL

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Prepared for:  
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1 BE IT REMEMBERED that the above-entitled and  
2 numbered matter came on to be heard at Open Meeting  
3 before the Arizona Corporation Commission, in Hearing  
4 Room 1 of said Commission, 1200 West Washington Street,  
5 Phoenix, Arizona, commencing at 12:00 p.m. on the 15th of  
6 December, 2009.

7

8  
9 BEFORE: KRISTIN K. MAYES, Chairman  
10 GARY PIERCE, Commissioner  
11 PAUL NEWMAN, Commissioner  
12 SANDRA D. KENNEDY, Commissioner  
13 BOB STUMP, Commissioner

14 APPEARANCES:

15  
16 For the Line Siting Committee:

17 Mr. Eberhart

18 For the Starwood Solar I, L.L.C.

19 Mr. Kenneth C. Sundlof, Jr.  
20 Mr. Brad Nordholm  
21 Mr. Jerry Smith

22 For the Arizona Corporation Commission:

23 Mr. Steve Olea

24 COLETTE E. ROSS  
25 Certified Reporter  
Certificate No. 50658

1 CHMN. MAYES: Let's go ahead and get started  
2 with Case 150.

3 Mr. Sundlof, you are doing double duty, I guess,  
4 today.

5 MR. SUNDLOF: I am.

6 CHMN. MAYES: It is your line siting day at the  
7 Commission.

8 We will have Mr. Eberhart give a brief overview  
9 and then we will go to the parties.

10 MR. EBERHART: Thank you, Madam Chairman,  
11 Commissioners. Case No. 150 is Starwood Solar I.  
12 Hearings were held over two days, October 26 and 27th,  
13 at Litchfield Park, Arizona. The hearings included an  
14 opportunity for public comment. The Committee did not  
15 in this case take a tour of the site.

16 The applicant is Starwood Solar I, L.L.C. and  
17 the project entails construction of a solar thermal  
18 electric facility with a nominal output of 290  
19 megawatts, construction of approximately a  
20 three-and-a-half-mile 500kV transmission line from the  
21 facility substation to the future Delany substation  
22 which was sited in Case No. 128. Also, part of the  
23 application was a new substation on the site to convert  
24 power from 138kV to 500kV. And third, and perhaps  
25 Mr. Sundlof could verify, part of the application was a

1 short possible 500kV line to connect between the site  
2 and the existing Harquahala plant.

3 The facility is to be located about 75 miles  
4 west of Phoenix and about a mile and a half south of  
5 I-10 on the southwest corner of 491st Avenue and Salome  
6 Highway. It is an L shaped property, 1920 acres, which  
7 would feature about 3500 solar collectors, two steam  
8 turbine generators and thermal energy storage.

9 As the record indicated, a PPA had not been  
10 consummated yet between the applicant and APS. That may  
11 have changed by now, I do not know, but there was  
12 proposed to be a 30-year PPA with APS.

13 As far as issues with the project, groundwater,  
14 it will use some groundwater. It is not located within  
15 the AMA. It is located within what is called the  
16 Harquahala irrigation nonexpansion area. The water will  
17 be provided to the facility from new wells. There  
18 are -- the site is existing agricultural. The  
19 irrigation wells will be capped. They project annual  
20 water consumption of 2,313 acre feet, perhaps as much as  
21 3,000 acre feet of water per year. Significant analysis  
22 was done of the water table in the area. It is  
23 projected to decline about a foot and a half per year  
24 over a 30-year period, which would be less decline of  
25 the water table than if it were allowed to remain

1 agriculture or developed as residential property.

2           Need for the project was established. It will  
3 provide reliable, clean solar power to Arizona Public  
4 Service. The impact on the environment, there is about  
5 three houses located within a half mile of the plant;  
6 although, I believe only one of them has anybody living  
7 in it. There is no others within a mile of the plant.  
8 It is a very isolated location.

9           As far as the power line, there were three  
10 alternative routes proposed but the Committee approved  
11 the preferred alternative, approximately 150 foot high  
12 poles within a thousand foot corridor. And the reason  
13 there was a preferred alternative that was not  
14 collocated -- there is an existing 500kV line along the  
15 south edge of the plant. The transmission line was not  
16 collocated there because there is a WECC, I don't know  
17 if it is a policy or a preference, that 500kV lines not  
18 be located within the same corridor, within, within the  
19 span lengths of the -- between the power poles. So this  
20 corridor, the spans would have had to have been about a  
21 thousand feet wide. So it didn't make sense to require  
22 that they be collocated.

23           That corridor, the existing line is located on  
24 what is called the Thomas Road alignment, which that's  
25 an extension of Thomas Road here all the way out to

1 491st Avenue.

2 So with that, I will be glad to answer any  
3 questions.

4 CHMN. MAYES: Thank you, Mr. Eberhart.

5 And what I would like to do, Commissioner  
6 Newman, is, before we start asking questions, if we  
7 could just take the applicant first.

8 And before we do that, do we have anyone here to  
9 make public comment?

10 (No response.)

11 CHMN. MAYES: Okay. Seeing none, Mr. Sundlof,  
12 if you would like to go ahead and make some opening  
13 statements.

14 MR. SUNDLOF: Thank you, Chairman Mayes,  
15 Commissioners. I am Kenneth Sundlof with Jennings  
16 Strouss & Salmon. I am representing Starwood Solar I.

17 Again Mr. Eberhart did a tremendous job of  
18 introducing the project and has talked about the major  
19 features of the project. The thing I want to emphasize,  
20 this project is a home run. I mean it is, it is in a  
21 great location for sunshine. It is supported by the  
22 community. It is on existing ag land. It will result  
23 in less water use. It is close to existing  
24 transmission. And it is clean solar energy. We even  
25 had the environmental community supporting this project.

1 Sandy Bahr from the Sierra Club testified in support of  
2 the project. We had one intervenor in the case and that  
3 was an adjacent property owner who was supportive of the  
4 project also. There were no public comments in  
5 opposition.

6 The open house for the project was well  
7 attended. Most of the people there were more interested  
8 in jobs than interested in whether or not this project  
9 was environmentally compatible. There is only one home  
10 within, as Mr. Eberhart mentioned, only one home in the  
11 area. Well, there are three homes but only one that  
12 seems to be lived in. And that gentleman came to the  
13 open house and seemed to be fine with the project. And  
14 we showed some views of that gentleman's view of the  
15 project.

16 The project is actually aesthetically pleasing  
17 because of the large fields of solar mirrors that kind  
18 of present a horizontal feature as opposed to other  
19 kinds of power plants. And it is sponsored by a very  
20 real and viable entity, Starwood Capital. I have with  
21 me seated to my right Mr. Brad Nordholm, who is the  
22 chief executive officer of Starwood Capital. And he has  
23 come to answer your questions, which I know what they  
24 are going to be. Mr. Nordholm will talk about --

25 CHMN. MAYES: Do you know what they are all



1 going to be?

2 MR. SUNDLOF: I don't know what they are all  
3 going to be.

4 CHMN. MAYES: Okay.

5 MR. SUNDLOF: But I suspect and the reason we  
6 have Mr. Nordholm here is that you will be interested in  
7 knowing what is the status of the negotiation with SRP  
8 and whether this project is viable or not. And those  
9 are really good questions. And, you know, we, of  
10 course, expect you will ask them.

11 These projects aren't easy to do. That's why  
12 you don't see -- if this were existing now, it would be  
13 the largest in the world. We don't see them popping up  
14 all over the place. There are a lot of risks involved  
15 and financing difficulties, risks in procurement in  
16 getting these things to happen.

17 We have now, and I think Mr. Nordholm will say,  
18 the project that's the farthest along of any of them in  
19 the western United States. And it is scheduled to, I  
20 mean it is going to go forward. He is going to discuss  
21 to you the steps that they are taking.

22 The APS PPA had to be cancelled not because of  
23 SRP, not because of APS, but because of difficulties in  
24 the procurement contracts, the engineering procurement  
25 and construction contracts and some of the glitches

1 there. APS is still interested. Starwood Capital is  
2 still interested with APS. And as late as last week  
3 they are still discussing a revised PPA for the project.

4 So in conclusion, I think I will let  
5 Mr. Nordholm answer your questions about Starwood  
6 Capital's intentions. And I will recommend to you the  
7 CEC is a great opportunity for Arizona.

8 CHMN. MAYES: Great. Thank you, Mr. Sundlof.

9 And thank you, Mr. Nordholm, for being here.  
10 Let me just start off by getting into this issue, if my  
11 colleagues will allow me to.

12 COM. NEWMAN: Madam Chairman, the only thing,  
13 Mr. Eberhart wanted to say something.

14 CHMN. MAYES: Oh, yes. Sorry, David. Go ahead.

15 MR. EBERHART: Madam Chairman, just to provide a  
16 couple more highlights of the project that I forgot to  
17 mention, the project cost will be, it was on the record,  
18 was between 1.7 billion and \$2 billion. The start-up is  
19 proposed to be 2013 with electric power generation 2014.  
20 At its peak the project would provide 7,724 jobs to  
21 Arizona and, on the environmental side, will eliminate,  
22 projected to eliminate 490,000 tons per year of carbon  
23 emissions. So, as Mr. Sundlof said, it seemed to the  
24 Committee very much a win/win situation.

25 CHMN. MAYES: Okay. Thank you, Mr. Eberhart.

1           Mr. Sundlof or Mr. Nordholm, let me ask you,  
2 let's just talk about the PPA situation. I know it was  
3 not obviously Starwood that walked away from the  
4 arrangement with Lockheed Martin, that was Lockheed  
5 Martin, thus really throwing a monkey wrench into it.  
6 Mr. Sundlof, I think, is putting the best possible spin  
7 on the situation. But that is my understanding from the  
8 record what -- and from, from the record that's my  
9 understanding of what happened.

10           On page 63 and 64 and 65 of the record, I think  
11 Chairman Foreman is asking some questions, asking for  
12 clarity on the EPC issue. The witness, I think for the  
13 applicant, stated that Starwood hoped to complete and  
14 receive final permits mid May to mid June and that they  
15 stated as, quote, as soon as we have clarity on our EPC,  
16 I presume they meant the replacement EPC for Lockheed  
17 Martin, which should be within the next few weeks, we  
18 will resume discussions with Arizona utilities and, as I  
19 previously mentioned, our first stop will be Arizona  
20 Public Service Company. Although you go on to mention,  
21 the witness goes on to mention that you are in  
22 discussions with other Arizona utilities as well. Then  
23 you stated later on page 64 that you believe there would  
24 be a, I think, a PPA mid December. And it is mid  
25 December. So do we have a PPA and do you have an EPC

1 replacement contractor?

2 MR. SUNDLOF: I would like to ask Mr. Nordholm  
3 to respond to that.

4 CHMN. MAYES: Okay.

5 MR. NORDHOLM: First let me say, Madam Chair, I  
6 am very pleased to be here. Commissioners, I am very  
7 pleased to be here. My name is Brad Nordholm. I am CEO  
8 of Starwood Energy Group Global from Connecticut.

9 We have invested nearly two years of effort in  
10 this project. And, as Mr. Sundlof said, we remain very,  
11 very enthused about this project. We believe this can  
12 be among the first, if not the first, large scale  
13 concentrated solar thermal plant in the western states,  
14 really in the United States, to move forward based on  
15 where we are in the permitting transmission interconnect  
16 and other credit paths for the project.

17 Madam Chairman, in direct response to your  
18 question, we do not have a PPA as of today. And let me  
19 provide some background.

20 The testimony that you cited talked about our  
21 efforts at the time of the Siting Committee hearings to  
22 secure alternative energy and procurement construction  
23 contracts. And I am pleased to report that those  
24 efforts are moving very well. The two-week, the  
25 two-week timetable that I cited in the siting board was

1 to engage in new engineering procurement construction  
2 negotiations. And while they are not resolved, which is  
3 why we don't have a PPA, they are very well underway.

4 What has happened in the last two years that we  
5 have been pursuing this and other concentrator solar  
6 thermal projects in the western part of the United  
7 States is that some of the leading engineering  
8 procurement construction firms in the world that have  
9 investment grade credit ratings, which we believe is a  
10 prerequisite for financing, and that have the  
11 engineering prowess, including molten salt storage, to  
12 build a project like this have shifted from a position  
13 of not being interested or ready to participate to now  
14 being very interested and very ready.

15 And so subsequent to the Siting Committee  
16 hearings, we were able to engage four which we narrowed  
17 to three engineering procurement construction firms and  
18 in tense negotiations. And as of today we have  
19 exchanged detailed term sheets. We are meeting with one  
20 of them in all day sessions with their senior management  
21 team this Thursday and another one of the viable  
22 finalists next Tuesday.

23 These are very large, complicated contracts and  
24 so it does take awhile. It is not something we can do  
25 on a standard form legal agreement in a matter days. It

1 is a matter of weeks and even months of negotiating it.  
2 But I am more encouraged today than I even was at the  
3 time of the Siting Committee meetings that there are and  
4 we will have viable EPC contractors for this project.

5 CHMN. MAYES: And is that, is that because you  
6 have indicated -- do you think that's because -- well, I  
7 don't want to go outside the record, but I think this  
8 issue is discussed in the record. One of the changes  
9 that was made is that the CEC allows for this to be  
10 broken up into two basically blocks, 145 as I understand  
11 it, 145 megawatts each.

12 I think in the record you discussed the, in the  
13 record indeed you do discuss the possibility that you  
14 won't use thermal CSP and that you might use  
15 photovoltaics, which to my understanding that's more  
16 financable these days. And I do think it is fair for us  
17 to discuss this issue of the viability of the project.

18 So is that, is that the case? I mean these  
19 other EPC firms, the Lockheed Martin replacements, for  
20 lack of a better term, are more willing to look at it  
21 because you have, in the CEC you have this, this  
22 duality.

23 MR. NORDHOLM: Our conversations with these EPC  
24 contractors are focused solely on concentrator solar  
25 thermal. There are many firms that are willing and able

1 to build photovoltaic projects and that's a much easier,  
2 much more easily financed form of construction. But  
3 based on our conversations with Arizona utilities,  
4 beginning first and foremost with APS, we understand  
5 that the performance attributes of concentrator solar  
6 thermal, the ability to generate during cloud cover, the  
7 ability to generate during a storm, the ability to hold  
8 thermal energy overnight, probably most importantly,  
9 most valuable, the ability to store and generate  
10 electricity in the 5:00, 6:00, 7:00, 8:00 p.m. range,  
11 particularly in August and September when the sun is  
12 setting a little earlier but the air conditioners are  
13 still running, that those performance attributes are  
14 very much needed here. So our sole focus is on  
15 concentrator solar thermal at this point. We wish that  
16 that not preclude photovoltaic in the future but that's  
17 the focus.

18 And in response to your other point, yes, the  
19 plant was always designed as essentially two 145  
20 megawatt blocks. We asked the siting board and are  
21 asking you to approve it so that we can actually build  
22 it in two phases. And, yes, that does make it easier  
23 from an engineering procurement construction standpoint  
24 as well as financing.

25 CHMN. MAYES: Okay. So the 145 megawatt blocks

1 would be CST blocks?

2 MR. NORDHOLM: Yes.

3 CHMN. MAYES: Okay. The other, the discussion  
4 was really interesting in the Siting Committee. And a  
5 number of fascinating issues came up, everything from  
6 the world supply of molten salt and where that comes  
7 from. I didn't know it came from Chile and Israel, so I  
8 learned that when reading the transcripts, fascinating.

9 And I don't know if it was you or another  
10 witness who talked about your belief that, as these  
11 projects get, start to get built, as they start to get  
12 closer into viability, that the worldwide production of  
13 molten salt will increase.

14 For either of you, and again please focus on the  
15 record, you know, one of my concerns is that we have a  
16 lot of projects right now. And I think this issue was  
17 addressed in the record. There are a number of projects  
18 out there right now vying for that salt. And, you know,  
19 it is your view and was there testimony in the record  
20 that you are going to get it and not somebody else?

21 MR. NORDHOLM: Yes, although there is  
22 uncertainty. If the few suppliers were to be flooded  
23 with orders from multiple projects at one time, it could  
24 become an issue. But, and let me hasten to add that  
25 there are other components that go into CST projects



1 where the worldwide level of production is also small  
2 relative to not current demand but potential near-term  
3 demand. For example, the receivers that are on the  
4 troughs is an example.

5 So there are logistics and supply challenges  
6 with these projects. My strong confidence that we can  
7 manage these is based on the fact that I believe that we  
8 can be among the first, if not the first, to be placing  
9 orders. And that's because of the status of the land,  
10 the environmental surveys, the water at this particular  
11 site, the time we have been working on this, the  
12 viability of us as a sponsor candidly, the increasing  
13 confidence that we are having in the openness of the  
14 credit markets. These things all line up to make us  
15 highly confident that this project can move ahead and,  
16 in response to your statement, to essentially be first  
17 in line.

18 CHMN. MAYES: Mr. Eberhart -- and then I will go  
19 to Commissioner Newman -- or for Mr. Sundlof as well, I  
20 read the record, but sometimes I do miss things. So in  
21 the record, was there testimony about whether dry  
22 cooling or hybridized dry cooling would be an  
23 appropriate technology in this case? Was that ever  
24 addressed by anyone? I know the water consumption issue  
25 was clearly addressed in the case. But were there

1 technology, were there questions about possible  
2 alternative technologies?

3 MR. EBERHART: Madam Chairman, my recollection  
4 is Sandy Bahr from the -- I don't know --

5 CHMN. MAYES: Sierra Club.

6 MR. EBERHART: -- Sierra Club --

7 CHMN. MAYES: She raised that?

8 MR. EBERHART: -- raised that.

9 COM. NEWMAN: You can't even utter that word.

10 MR. EBERHART: I couldn't utter it on the  
11 record. Madam Chairman, there was testimony, I believe,  
12 that it was not appropriate for this type of facility.  
13 Perhaps Mr. Sundlof's memory of that testimony is better  
14 than mine.

15 CHMN. MAYES: Yes. And I apologize, I just  
16 missed it.

17 Mr. Sundlof.

18 MR. SUNDLOF: Chairman Mayes, thank you. There  
19 was testimony by the project manager, Mr. Rich Weiss,  
20 about the economics of dry cooling. And basically in a  
21 nutshell, if production is down about 9 percent, that  
22 affects the economic viability of the project. And it  
23 is for that reason that the project chose this existing  
24 agricultural land, in order so that we could present a  
25 net water use reduction to you for the project. It is

1 much more viable to do the wet cooling at this point.

2 CHMN. MAYES: Okay. And certainly this issue, I  
3 am sure, would get different play in different cases. I  
4 mean obviously this is an area where the record shows  
5 there is, you know, there is going to be less, you know,  
6 basically flipping former agricultural land and there  
7 will be less water use than the prior use. And I am  
8 sure the issue of dry cooling would take on greater  
9 import if you did not have that circumstance. And I  
10 have no doubt that the Committee will be faced with that  
11 circumstance not too long in the future.

12 Commissioner Newman.

13 COM. NEWMAN: Madam Chairman, I know you want to  
14 break in around five minutes and I had more than five  
15 minutes of questions.

16 CHMN. MAYES: Why don't you go ahead and start.

17 COM. NEWMAN: But in order to make the  
18 transition a smooth one, I, off the record I commented  
19 that you stole one of my questions when you asked about  
20 dry cooling.

21 But it is in the record that on page 95 that dry  
22 cooling would increase costs by 9 percent. And it was  
23 one of the questions that I wanted to ask both the  
24 Committee and actually I prefer Mr. Nordholm actually  
25 ask this question -- answer this question, and his

1 attorney, because I think that this is an issue. And if  
2 there is anything that I sort of demure on, it would be  
3 this issue, given the size of the plant, the future of  
4 the Harquahala Valley and how important this water  
5 source is going to be for Arizona's future. So I guess,  
6 you know, give me your company's position on this first,  
7 and then I have other questions on this point.

8 MR. NORDHOLM: I think there are two aspects of  
9 it. First, I think it has been pointed out very well.  
10 We deliberately sought out cultivated land where we  
11 would be using less water than the current use. And  
12 that's the case with this site. And the replenishment  
13 studies and others, which I think are well documented,  
14 you know, we see a net advantage to the water resources  
15 having this plant on this land rather than the current  
16 agricultural use.

17 But I would like to comment on the other aspect  
18 of it, which is the 9 percent difference in cost. It is  
19 a competitive marketplace. And so when we propose PPA  
20 pricing to a utility, we are doing so with what we  
21 believe to be our capital costs of the project and our  
22 financing for the project. And we then analyze that  
23 very carefully to see how low a PPA price can we bid and  
24 still have an economically viable project.

25 And so when we first proposed this project to

1 APS, we did so assuming that it would be a wet cool  
2 project of this configuration. And we proposed pricing  
3 that reflected that configuration. If there had been a  
4 requirement, for example, of dry cooled, dry cooling and  
5 the commensurate higher cost, that would have been a  
6 factor in the bid. And there also in a competitive  
7 marketplace is not only the question of the price of the  
8 PPA relative to what our competitors might offer but the  
9 price of the PPA relative to conventional sources of  
10 generation which ultimately become a consideration in  
11 this analysis and certainly for you in setting and  
12 implementing important policy here in Arizona. So  
13 because of our confidence in the site, we bid it as  
14 basically a wet cool project. And those are the reasons  
15 that went into it.

16 COM. NEWMAN: Madam Chairman, if you don't mind,  
17 this -- I would really like to delve into this.

18 CHMN. MAYES: Sure. Do you want to take a break  
19 now and come back?

20 COM. NEWMAN: Yes, sure, that would be fine.

21 CHMN. MAYES: Let's do that. Let's take an hour  
22 lunch break and come back at 1:30 for the conclusion of  
23 the case.

24 (A recess ensued from 12:28 p.m. to 1:45 p.m.)

25 CHMN. MAYES: Let's go ahead and go back on the

1 record. I know Commissioner Newman was asking  
2 questions, and I know he will be here momentarily. He  
3 had to take care of a personal matter. So we will go  
4 back to, go to other questions. I don't know if my  
5 colleagues have any specific questions but I have a  
6 couple more.

7 Mr. Sundlof, or anyone who can take this  
8 question, I thought it was an interesting question that  
9 was asked by Member Youle, I think, about a possible  
10 Cal ISO control of the project, dispatch from the  
11 project if a California utility were chosen for or if  
12 you signed the PPA, a PPA is with a California utility.  
13 And I wasn't entirely clear with the witness' answer.

14 And maybe that was -- I don't know if that was  
15 you, Mr. Nordholm, or somebody else. But was the answer  
16 that Cal ISO wouldn't control dispatch if the power went  
17 to a California utility?

18 MR. SUNDLOF: Chairman Mayes, maybe that's a  
19 question that would be answered by Jerry Smith, who was  
20 our witness on transmission issues --

21 CHMN. MAYES: Okay.

22 MR. SUNDLOF: -- who is here.

23 CHMN. MAYES: Great. It would be great to have  
24 Mr. Smith back.

25 MR. SMITH: Good afternoon, Chairman Mayes and

1 Commissioners. This is a question that I did not answer  
2 on the record, but we did have a response to the  
3 question.

4 The interconnection request is with Arizona  
5 Public Service Company. So they will be the  
6 transmission party that will control the scheduling over  
7 the transmission system. As you know, historically the  
8 only way that Cal ISO would have scheduling control of  
9 the units is if the units are connected to a Cal ISO  
10 transmission line.

11 CHMN. MAYES: Right.

12 MR. SMITH: And certainly as originally  
13 envisioned, the Palo Verde/Devers 2 would have  
14 terminated at the same Delany switchyard. And that  
15 would have provided access to Cal ISO to schedule the  
16 units as Cal ISO units.

17 But at this stage, the implementation of this  
18 project is not dependent upon the Cal ISO and the Palo  
19 Verde/Devers 2 line and the intent by the project is to  
20 seek interconnection and service to Arizona utilities.

21 CHMN. MAYES: Okay. And that's what I thought  
22 the answer in the record meant, but I thought it was an  
23 interesting question. And certainly those types of  
24 issues will continue to be present for us as we go about  
25 building transmission throughout the southwest and as we

1 go about building these projects for all of our states.

2 I mean, you know, as I think was indicated by  
3 the testimony in the case, it was interesting that  
4 several Committee members asked questions about the  
5 commerce clause issue. And possibly, Mr. Eberhart, I  
6 don't know that it was you or maybe you and Mr. Wong who  
7 raised issue that the power be used in Arizona. And I  
8 appreciate -- I disagree with the notion that we should  
9 place those types of limitations, and I don't even know  
10 that you came to that conclusion, in fact, I think you  
11 said you didn't necessarily, that we should necessarily  
12 place those kinds of restrictions on use of the power.  
13 But I appreciate the fact that you raised it because I  
14 think it needs to be addressed. And certainly Arizonans  
15 will expect the question of where the power is going to  
16 be answered and those types of issues to be vetted at  
17 the Line Siting level.

18 I wanted to ask the parties also, or the  
19 applicant and maybe Mr. Eberhart, I think the Chairman  
20 of the Line Siting Committee again raised the question  
21 of whether there ought to be some provision in these  
22 CECs regarding requiring the owner of the CEC to come  
23 back to the Commission for approval if you were to sell  
24 it or transfer it to another entity. And he raises, the  
25 Chairman of the Line Siting Committee raises the



1 question, well, what if some sovereign wealth fund of a  
2 foreign country were to acquire or seek to acquire the  
3 CEC. Now, clearly, if a sovereign wealth fund of Saudi  
4 Arabia or Dubai or whatever were to seek to acquire one  
5 of these CECs, we probably would want to know about it  
6 and probably there might be circumstances where we would  
7 want to have some say over it. Ultimately that was not  
8 adopted in this case, Mr. Sundlof, I take it?

9 MR. SUNDLOF: That is correct.

10 CHMN. MAYES: Okay. And, again, the argument  
11 against that is what?

12 MR. SUNDLOF: Chairman Mayes, there were two.  
13 The first is a practical one. And we are trying to,  
14 Starwood is trying to get this project built. And the  
15 imposition of a condition requiring a possible future  
16 approval without conditions or understanding is simply a  
17 negative in financing. You know, the fanciers want to  
18 know that the project can continue to run even if there  
19 is a problem with the current owner. And so we did not  
20 want to put a negative into the CEC that would affect  
21 the viability of the project. And Mr. Nordholm can talk  
22 more about that if you would like.

23 The second, and I have talked a lot with  
24 Chairman Foreman about the issue, and I understand it,  
25 under the current rules, the CECs are transferrable.

1 R14-3-213(D) said -- or (F) -- says upon notice filed  
2 with the Committee and accompanied by an agreement on a  
3 form supplied by the Committee in which the transferee  
4 agrees with the terms, limitations and conditions  
5 contained within a Certificate of Environmental  
6 Compatibility, such certificate may be transferred to  
7 any utility.

8 So there is the practical matter and there is  
9 the matter of the rules. And I think those are the  
10 reasons that the Committee declined to impose that type  
11 of a condition.

12 CHMN. MAYES: Okay. APS did not participate in  
13 the case, am I correct, Mr. Sundlof?

14 MR. SUNDLOF: Chairman Mayes, you are correct.  
15 And while you are mentioning APS, I want to correct a  
16 possible misstatement or maybe a misunderstanding of  
17 what I might have said.

18 The PPA with APS is not existent. There are no  
19 active negotiations for a new one. There are periodic  
20 contacts, but there are no active negotiations for a new  
21 one. At such time as the EPC contract is in place and  
22 Starwood is ready to break ground, it will, of course,  
23 actively discuss with APS the possibility of  
24 reinitiating these negotiations. But I wanted to be  
25 clear that they are not going on at the present time.

1 CHMN. MAYES: Okay. Well, and this -- all  
2 right.

3 MR. SUNDLOF: And I hope I answered your  
4 question; APS was not a party to this case.

5 CHMN. MAYES: Yes, and I appreciate the  
6 clarification on the other issue.

7 And I don't want, Ms. Alward, I don't want to go  
8 outside the record in these questions, so stop me if it  
9 sounds like I am, please, at any time.

10 But I do think it is relevant. And it puts us  
11 in a difficult position because we have had two cases  
12 now where the issue was addressed by the Line Siting  
13 Committee of the PPA. I mean I know Mr. Eberhart  
14 addressed it and it was addressed in the case. An  
15 answer was given that we are, well, we are just days  
16 away or we are weeks away from having a signed PPA or we  
17 are weeks away from having in this case the EPC partner.  
18 And then we get to the open meeting and neither are the  
19 case.

20 And so I don't know -- I am trying to walk a  
21 line here in terms of what I can and can't address.  
22 But, you know, it strikes me that we could, and maybe  
23 the Commission is okay with this, but we could be about  
24 to sign, approve a CEC for a project that, you know, may  
25 or may not ever come to fruition. And it would be my

1 hope that it does very much. But there is no utility in  
2 the room that is, that you are working with right now.  
3 And you don't have the PPA. And you don't have the EPC  
4 contract, or yet. So it is, it is a slightly awkward  
5 situation, it strikes me.

6 MR. SUNDLOF: Chairman Mayes, we understand your  
7 point of view. I think -- and we tried to address that  
8 as well as we could in the testimony before the Siting  
9 Committee.

10 The reality of the situation is these are hard  
11 to do and we need to, our feeling is we need to find  
12 viable, very strong companies like Starwood Capital, and  
13 there are others, of course, that have the capability of  
14 taking this forward and hope that it can happen --

15 CHMN. MAYES: Right.

16 MR. SUNDLOF: -- do what we can to encourage it.

17 CHMN. MAYES: Okay. Do you, for either of you,  
18 do you have a sense of -- I know Mr. Nordholm had said  
19 that you are very close to, you are in negotiations with  
20 the EPC partner -- do you have a sense of an ETA on  
21 that, I mean when that might happen? And then can you  
22 file something in the docket with the Commission when it  
23 does? And when you either have a PPA or when you are  
24 close to having one, I suppose.

25 MR. NORDHOLM: First of all, in terms of timing,

1 we actually hope and believe that we can make a choice  
2 between a couple very viable options by the end of the  
3 month. And the objective would be to have a documented  
4 EPC around the end of January.

5 And if the impression from the testimony at the  
6 time of the Siting Committee was that the actual EPC was  
7 going to be signed within a couple weeks, if I  
8 contributed to that, I am sorry, because that was never,  
9 never the intention. That was never the expectation in  
10 the month of October. Where we are today is where  
11 actually we hoped to be today, and with a goal of having  
12 it signed by the end of January.

13 But in terms of a commitment to file an update,  
14 obviously protecting, you know, that information which  
15 was confidential for competitive purposes, we would be  
16 pleased to cooperate in any way we can in that regard.

17 CHMN. MAYES: Okay. Well, I would request that.  
18 And I would be fine with you filing that under seal if  
19 it is necessary.

20 MR. SUNDLOF: Chairman Mayes, we will commit to  
21 do that.

22 CHMN. MAYES: Okay. Are there other questions  
23 on this? Commissioner Newman is not back yet. We  
24 could -- I know he had some questions. We  
25 could -- well, why don't we do this. Let's take --

1 let's not take a break. It is too soon to take a break.

2 Do my colleagues have any other questions?

3 (No response.)

4 CHMN. MAYES: No, okay. Well, I think that we  
5 are probably going to have to go ahead and vote it  
6 without any other questions. The only other option  
7 would be to table it and come back to it, which we could  
8 do.

9 COM. PIERCE: Either way.

10 CHMN. MAYES: Okay. Well, we will do that.

11 Can you guys hold on for a few minutes? We are  
12 going to go to another item and come back to this.

13 MR. NORDHOLM: Okay.

14 CHMN. MAYES: Stick around for a few minutes.  
15 We are going to go to SolarCity and come back to you.  
16 It is all about solar, right, while we are on the  
17 subject?

18 (A recess ensued from 1:59 p.m. to 2:25 p.m.)

19 CHMN. MAYES: Okay. We are back on Item No. 6  
20 with the questions for the proposed Line 150. And,  
21 Commissioner Newman, I know you were asking questions.

22 COM. NEWMAN: Yes, I was. First of all, I  
23 wanted to thank the Chair for this brief recess from  
24 this matter. And now that we are back on I do want to  
25 continue with some of the questions about dry cooling.

1 And as I said before, I was, to the extent possible, I  
2 was on the listen line listening to your questions,  
3 which were a part of what I was going to be asking. So  
4 I won't be repeating questions that you asked, for the  
5 record. That was part of, part of what I was going to  
6 go over with Mr. Nordholm.

7 Again, Mr. Nordholm, we were just discussing dry  
8 cooling. And you gave the company's position that the  
9 9 percent cost is considering the PPA but it is a very  
10 competitive environment and that such costs could not  
11 only increase your own costs, it would change the PPA as  
12 written then, I suppose, with APS. And it goes to --  
13 and I am glad that Mr. Eberhart is here, former  
14 Representative Eberhart, because one of the reasons I  
15 was, I was asking these questions, and it is in the  
16 record, but this is the first chance, I think we are  
17 going to get a chance to sort of interplay a little bit  
18 between the Committee and this huge prospective project  
19 that I can tell you I personally take note of. I know  
20 all the Commissioners do. And I have been trying to  
21 find out about its present status.

22 So dry cooling is an important issue to me and I  
23 think it is to the rest of the Commission. And I know  
24 it is to the constituents of Arizona, because it, it  
25 deals with the issue of how much water you have to use

1 in a solar concentrator format as opposed to  
2 photovoltaic.

3 And, of course, even though the Harquahala  
4 Valley has agricultural water underneath it, historical  
5 use was growing melons. I think that's in the record.  
6 You know, I know I get this question more often than not  
7 when discussing solar, well, aren't we going to be using  
8 too much water out there in the desert. And so while  
9 there is an issue of cost, there is an issue of  
10 scarcity, at least in the Harquahala Valley.

11 Do you agree that the State of Arizona and the  
12 Commission should be concerned about water scarcity when  
13 planning even solar plants? Do you agree?

14 MR. NORDHOLM: Certainly I agree. I think we  
15 have made the case for why for nearly two years we have  
16 been going down the path for wet cooling for this  
17 project, because of both the availability of water and  
18 the fact we are going to be using significantly less  
19 water than the current land utilization for the project.  
20 But certainly it is a huge issue in the west and  
21 becoming an even larger issue. We acknowledge that.  
22 And as additional projects are brought forth, we are  
23 very open to making decisions about what we should be  
24 proposing in the context of public policy and debate.

25 COM. NEWMAN: The reason why I am not going to



1 have any direct questions for David, but I wanted him to  
2 join in whenever he wanted to in this discussion, but  
3 one of the things that I have learned since I have been  
4 here is that, you know, the Line Siting Committee has a  
5 lot of important responsibilities. And they have a lot  
6 of important questions to ask when siting. And while I  
7 totally agree -- I said totally again; I must be  
8 becoming a valley guy -- but I agree that Harquahala  
9 Valley is by far one of the best places in Arizona to  
10 look for solar since it is in the Palo Verde network as  
11 well as being close to labor and good sun.

12 I have, I am having some regrets that we don't  
13 have a broader policy regarding cooling for not only  
14 solar plants but for all the plants in Arizona. And one  
15 of the, one of the issues, we addressed it earlier  
16 today, you might have been in the room, the Line Siting  
17 Committee is a separate statutory authority and we  
18 appoint these gentlemen and ladies, who do a great job.  
19 But we never have time to talk about this issue, and it  
20 relates to your case for sure, at the Line Siting  
21 Committee and below. We usually don't attend; we are  
22 not raising those issues. Here it was raised.

23 And I am in touch with some folks, this is not  
24 on the record but I stated before, I am in touch with  
25 some folks who have information regarding other types of

1 cooling. And recently the State of Arizona, the Chair  
2 well knows that the State of Arizona is going to attempt  
3 to, I guess the Brewer administration along with DWR,  
4 department of economic quality, the Corporation  
5 Commission, and I am forgetting whom else, but we are  
6 all going to be involved in some joint projects  
7 regarding what is called hybridized cooling.

8 So I am sitting here today, and the PPA is off  
9 the table for now. I am impressed by your confident  
10 statements about your project. But am I -- I just  
11 wanted to ask, you know, because this wasn't raised  
12 below. It is hard for me to ask this. But, you know,  
13 there is no PPA right now, so could, would a future look  
14 at this be hybridized cooling, and how does that relate  
15 to the Line Siting Committee authority?

16 CHMN. MAYES: Mr. Eberhart, do you want to --

17 MR. EBERHART: Thank you, Madam Chair,  
18 Commissioner Newman. I think from the Line Siting  
19 record, it was discussed. And I hesitate because I have  
20 not examined the transcript precisely.

21 COM. NEWMAN: That's why I was hesitating.

22 MR. EBERHART: So I don't want to say something  
23 that I might be confusing with another case. But there  
24 is in the application a page that's very instructive  
25 regarding the groundwater use, that they can, this

1 property can use. It is on page B-1-2 of the  
2 application.

3 This site is located in what is called an INA,  
4 an irrigation nonexpansion area, that is governed by  
5 A.R.S. 45-440, which places limitations on how much  
6 groundwater they could use. And in the application,  
7 they point by point show that they have met all of those  
8 criteria for groundwater pumpage. And in a generalized  
9 fashion, when you take irrigated land out of production,  
10 irrigated agricultural land out of production and use it  
11 for industrial, the uses, the groundwater use is almost  
12 always going to go down, which is a benefit to the  
13 state, I think, as far as the groundwater recharge and  
14 so forth. Obviously a photovoltaic type situation uses  
15 much less water because their water usage is primarily  
16 just to clean the mirrors and things like that. But in  
17 this case, this is an existing agricultural usage, and,  
18 while there are some limitations, those limitations are  
19 pretty broad as far as how much groundwater they can  
20 pump. So within the existing statutes, they meet all of  
21 the requirements.

22 COM. NEWMAN: Well, at the risk I am not going  
23 to go off the record here, but this was good for my  
24 purposes to demonstrate the interrelated issues that we  
25 have with the Line Siting Committee and being on,

1 sitting up here reviewing this after the fact, there  
2 will be just sort of a point of public interest for all  
3 concerned that there will be some attempt by the state  
4 to talk about this. And I am certainly interested in  
5 it. So it, it -- I am, you know, even though you give  
6 me very good reason and I understand from the record  
7 about cost and the fact that it is a place where water  
8 is available within reasonable means, we are  
9 getting -- I am feeling the pressure, not the pressure,  
10 I am feeling the need to explore what DWR is bringing to  
11 us on hybridized cooling.

12 So, again, we are going to have to vote on this.  
13 This is sort of what the Chair was talking about earlier  
14 in her line of questioning. You know, we are in this  
15 situation again where a PPA has blown up through no  
16 fault of Starwood. And it looks like it might be  
17 getting close, but, you know, again, Madam Chair,  
18 another huge \$2 billion project in which the discussion  
19 of dry cooling versus hybridized cooling is not really  
20 on the table for us.

21 And so it is like is this the cart before the  
22 horse sort of hearing on this issue of dry cooling of  
23 hybridized cooling. I feel as if, at least in my  
24 position as Commissioner, that I have a higher standard  
25 to ask these water questions.

1 CHMN. MAYES: Sure. And let me tell you where I  
2 am coming from. You know, I certainly agree with your  
3 interest, share your interest in having dry cooling and  
4 hybridized dry cooling addressed. In fact, I am in the  
5 process of writing a letter to my colleagues about this  
6 issue. And I think we should address it generically.  
7 And I feel really confident that the Line Siting  
8 Committee is going to be addressing it, and I think they  
9 did in this case.

10 I think this case just was one that presented  
11 facts and circumstances that didn't really call for it.  
12 And when we have these cases, there is clearly going to  
13 be, you know, a debate about whether we are willing to  
14 pay that premium associated with dry cooling and where  
15 it is appropriate to call for that premium and to accept  
16 the premium in order to save water. And, you know,  
17 clearly that's going to be more salient in cases  
18 involving undisturbed land, BLM land, state trust land,  
19 you know, more arid parts of the state; although, the  
20 entire state is pretty arid. And I really think the  
21 Committee recognizes that and will address it; although,  
22 you know, probably our comments today will only further  
23 sharpen that pencil and sharpen that instinct.

24 But as for DWR, I know they are interested in  
25 it. We received a letter, I think, two years ago from

1 Herb Guenther about this. And Laurie Woodall is in the  
2 audience and she was the Chairman of the Line Siting  
3 Committee. And she is nodding her head that I am right  
4 about this. But we received a letter then from him that  
5 he was interested in seeing dry cooling addressed. So I  
6 know they are interested in that. I am sure it will be  
7 an issue that will be brought up in our Blue Ribbon  
8 Committee that our Commission is part of with DWR. And  
9 I am sure it will be addressed by the Line Siting  
10 Committee. And certainly if it is not, my guess is  
11 future cases' Commissioners won't feel comfortable  
12 voting for projects without it having been addressed.

13 COM. NEWMAN: Madam Chair, that's -- I am glad  
14 you spoke up, because that's the colloquy I wanted to  
15 have on the record for everyone to understand. And I  
16 mean I am going to, I am looking, actually I had, I met  
17 with Director Guenther not too long ago about this  
18 issue. And I also mentioned it to the DEQ, one of the  
19 DEQ liaisons who I had lunch with just last week, that  
20 we all need to be working together on this so that the  
21 Line Siting Committee and the Commission and potential  
22 vendors out there, you know, companies need to know that  
23 this is a big point with at least one of the  
24 Commissioners. It sounds like the Chair is also  
25 concerned. I know we are all concerned about water use.

1 That's the feedback that we get.

2 My information -- I will stop there with the dry  
3 cooling questions. My information is that there is  
4 technology out there that could be very helpful. I have  
5 been in contact with a person named Mr. Powers out of  
6 San Diego, I believe, who is one of the country's  
7 experts on dry cooling. And he is willing to come to a  
8 proposed workshop, if we ever have it, on that subject,  
9 or if it fits into another subject, he would be  
10 available on his own dime to advise, because he is  
11 actually one of the best people in the country. But I  
12 thank the Chair for that.

13 And I wanted to ask some questions about the  
14 viability of your company and a bit what happened with  
15 the term, I am not quite sure I understand, but the  
16 contract portion of this that was supposed to be done by  
17 a niche of only a couple of companies, not a couple but  
18 probably a list of 10 to 15 companies in the country can  
19 handle such business.

20 Do you want to describe why the project fell out  
21 after a highly publicized introduction?

22 MR. NORDHOLM: Madam Chair and Commissioner  
23 Newman, we did have a setback in September when we were  
24 not able to execute our full EPC. And the reason for  
25 that, as we publicly stated, was that the risks

1 associated with EPC, and that is the types of damage  
2 provision and other forms of liability on an EPC  
3 contractor, given the size of the project and the  
4 relative newness of the technology, were in the end  
5 deemed to be an unacceptable risk balance. We were  
6 really in a position where we had to regroup, which  
7 included the termination of the PPA.

8           The project in many respects, though, has  
9 continued to go ahead in that we have continued to make  
10 excellent advances in permitting.

11           And I would note in response to your prior  
12 statements that, you know, were new technology  
13 requirements to be imposed on this project, it would set  
14 us back more than a year and many millions of dollars  
15 and would, would force us to rethink whether we could  
16 proceed on that basis. So I just want to get on the  
17 table that these are expensive decisions that are being  
18 made. But in --

19           COM. NEWMAN: Stop right there. So you are  
20 saying 9 percent of \$2 billion, that's what dry cooling  
21 would cost?

22           MR. NORDHOLM: If, if we had to increase, if we  
23 had to change the technology, it would require that we  
24 begin the permitting process and make amendments to  
25 permitting. The process would back us up a year and



1 many dollars and would force us -- I am a fiduciary for  
2 our investors' capital -- force us to think whether this  
3 was a good investment. As it is today, we consider it  
4 to be a very good investment, which is why we continue  
5 to very aggressively pursue this project. We have made  
6 advancements to permitting on our transmission  
7 interconnection process. We have a deal. We have a  
8 loan guarantee that was filed for last summer and where  
9 we passed the part one hurdle and have now been invited  
10 into part two.

11 And, as I mentioned earlier today, during the  
12 time that we have been working on this project, new  
13 engineering procurement construction firms have emerged  
14 that are highly motivated to this business and see this  
15 as one of the most interesting projects simply because,  
16 as a couple was stated to us, this is probably a year  
17 and a half ahead of most of the ones that are on the  
18 board in the United States and can actually be done as a  
19 2010 project, not a 2011 or 2012 project.

20 So in many respects we have made great advances  
21 in this project. And, yes, the situation last fall was  
22 a setback. I think I have explained why and I explained  
23 what our path forward is and why we will remain very  
24 optimistic, very confident even about this and why we  
25 are continuing to expend millions of dollars to make

1 this project a reality.

2 COM. NEWMAN: And I heard a little bit of  
3 discussion on the land line radio about export versus  
4 import power. People -- the Chair was asking those  
5 questions. I was thinking about them as well. I am not  
6 going to go ask that question.

7 But I will ask, with all the jobs that it will,  
8 it could create with the investment, investment chain of  
9 events that could happen, the causation, the  
10 investment -- I forgot, there is a term of art I am  
11 looking for -- but the investment producing more  
12 investment, that it would be a wonderful thing to happen  
13 in Arizona. And I do think it would be. And so I am  
14 prone to vote yes on this today to move it along, but  
15 only partly. The biggest, one of the biggest reasons  
16 would be because you appeared and sort of provided this  
17 continuity on the issue.

18 Can I ask you, you said that you hold various  
19 people's investment funds. What exactly is, what is  
20 your company and what is your role in holding people's  
21 funds?

22 MR. NORDHOLM: Sure. Yes, certainly, Madam  
23 Chair and Commissioner Newman. Starwood Energy is part  
24 of the Starwood Capital Group. We are about a  
25 20-year-old private equity fund where investors who, in

1 the case of Starwood Energy, are interested in  
2 participating in investments in high voltage  
3 transmission, which is one of our areas of focus; solar,  
4 which is an area of focus. In fact, this week we are  
5 closing a 60 megawatt photovoltaic project that's moving  
6 ahead actually in Ontario of all places --

7 COM. NEWMAN: Ontario, Canada, not California.

8 MR. NORDHOLM: Yeah.

9 -- and natural gas-fired generation. So  
10 investors who want to participate in this type of  
11 investment give us discretionary management of their  
12 funds for a period of ten years.

13 COM. NEWMAN: And these private investors are in  
14 North America, Europe, all over the world, or how would  
15 you characterize it?

16 MR. NORDHOLM: They are global but concentrated  
17 in North America.

18 COM. NEWMAN: In North America. And the holding  
19 company for this firm, or how are you -- are you -- is  
20 it privately held? Is it publicly traded?

21 MR. NORDHOLM: It is privately held. Barry  
22 Sternlicht is the founder and chairman. Underneath the  
23 management company there are -- there is a public  
24 company, for example, that is under the management. It  
25 is called Starwood Property Trust. It was a recent IPO

1 this year, but it is one of a series of investment  
2 vehicles.

3 COM. NEWMAN: I think I heard of it. That's one  
4 of the reasons why I asked you.

5 MR. NORDHOLM: Starwood Hotels and Resorts was  
6 created by Starwood Capital and spun out as a public  
7 company, as an example.

8 COM. NEWMAN: Madam Chair -- okay.

9 CHMN. MAYES: We do need to move along.

10 One last, let me ask one last question. The  
11 project which is on the screen here involves a short  
12 transmission line. And Mr. Eberhart described it. One  
13 question that I have, and, you know, maybe this is a  
14 question that could be, that we need to be thinking  
15 about and contemplating, and maybe the Committee does as  
16 well, is, and this may be a question for Staff: Are we  
17 tracking all of these radial transmission lines that we  
18 are approving associated with especially solar projects?

19 And, Mr. Olea, I know I talked to you behind the  
20 scenes about the possibility of doing some sort of  
21 mapping where we map the CECs that we have granted. I  
22 don't think it has ever been done in Arizona. We have  
23 granted a lot of CECs for both solar projects, and they  
24 are sort of all starting to get clumped in the same  
25 general geographic area, and we are approving these

1 gen-tie lines.

2 It would be, I think, constructive for not only  
3 the Line Siting Committee but also for the Commission to  
4 be able to visualize everything that has been done and  
5 is being done, because we have a lot of CECs out there  
6 that haven't been built yet but have been granted.

7 So, is that possible? Is that something that we  
8 could do? I know there might be some security issues  
9 around that, but it seems like it would be helpful to  
10 know, you know, what we had out there, because even in  
11 this sort of general geographic area, I know the  
12 Commission has recently approved another solar project  
13 and another gen-tie line.

14 MR. OLEA: Madam Chair, Commissioners, we are  
15 actually working on that per your request that you had a  
16 couple months ago. And so we are putting that together.  
17 It is a little difficult because some of these CECs  
18 don't have a real good description as to where the line  
19 goes. So it is going to be a pretty general map. We  
20 are actually working on that to put on the current map.  
21 We will just do it on a different layer.

22 CHMN. MAYES: And the current map is currently  
23 constructed transmission?

24 MR. OLEA: Right, the lines that are built. And  
25 so we will put this on a different layer. And as soon

1 as we get something, we can pass it out to the  
2 Commissioners for their use, because along with the map  
3 we currently have, we don't pass that out to the public  
4 because of the security issues.

5 CHMN. MAYES: Could we give that to the Line  
6 Siting Committee as well?

7 MR. OLEA: That would be up to you.

8 CHMN. MAYES: Oh, okay. Maybe we can talk about  
9 that at a Staff meeting --

10 MR. OLEA: Yes.

11 CHMN. MAYES: -- just for their purposes,  
12 because they are, I mean since they are getting the  
13 first level review of this, it would seem it would be  
14 good for them to know that as well. It might generate  
15 questions at the Line Siting level as well.

16 MR. OLEA: It is something we may want to talk  
17 about with Legal and yourself.

18 CHMN. MAYES: Okay. All right. If there are no  
19 other questions, Commissioner Pierce...

20 COM. PIERCE: Madam Chair, I move Utilities  
21 Item 6, Sample Order No. 1.

22 CHMN. MAYES: Okay. Commissioner Pierce has  
23 moved U-6, Sample Order No. 1, because we don't have any  
24 orange paper on this matter.

25 If there are no other questions or comments,

1 Madam Secretary, please call the roll.

2 SECRETARY BERNAL: Commissioner Kennedy.

3 COM. KENNEDY: Madam Chairman, for the record, I  
4 am not voting no, but I am voting aye for solar and more  
5 jobs for Arizona.

6 SECRETARY BERNAL: Commissioner Stump.

7 COM. STUMP: Aye.

8 SECRETARY BERNAL: Commissioner Newman.

9 COM. NEWMAN: I actually agree with Commissioner  
10 Kennedy, that, as I said before, I thought this was a  
11 very promising project and was disturbed when I read a  
12 couple months ago one of the principals falling out of  
13 the project.

14 I thought it was really good to have one of the  
15 main representatives of the company come here today and  
16 I appreciate it. It is very, very helpful. And I am  
17 going to vote yes.

18 I think the Harquahala Valley is one of the  
19 places in Arizona, if not one of the principal places in  
20 Arizona, where we are going to be known worldwide for  
21 both concentrators and photovoltaic and whatever new  
22 technology that our professors at the U of A and ASU and  
23 NAU can dream up. And I know that there is some of that  
24 technology out there. And I really look forward to  
25 hearing from the company in the future regarding its

1 plans for Harquahala Valley and would encourage our  
2 utilities, from the rural co-ops on down, on up as you  
3 might say, to participate.

4 This kind of financial opportunity does not come  
5 to Arizona very often. One of the questions I was going  
6 to ask but I will just state it, I know we are in  
7 competition, for example, with China and other  
8 developing countries for this technology as well and  
9 just recently was listening to Tom Freedman and a couple  
10 of other economists who say that, unless we invest in  
11 this technology here, especially in Arizona where the  
12 sun is really a perfect sun to raise power, if you  
13 would, then, you know, this country is not going to meet  
14 its obligation with regard to clean energy.

15 So I support this plan. And I urge APS and SRP  
16 and whoever to come up with enough partners to make it a  
17 viable plan. And I think that -- I am glad that the  
18 Committee agreed with that.

19 And just a last statement on dry cooling. I do  
20 got to tell you, I heard what you said today. I have  
21 some other arguments that counter that but that's,  
22 that's not why we are here today. But, please, if we as  
23 a Commission and if the state want to go forward with  
24 some sort of water conservation programs for solar  
25 concentrators, that I would ask the company to take



1 notice of that and put it into their prospectus for the  
2 PPA.

3 And with that, I vote aye.

4 SECRETARY BERNAL: Commissioner Pierce.

5 COM. PIERCE: Aye.

6 SECRETARY BERNAL: Madam Chair Mayes.

7 CHMN. MAYES: Very briefly, I wanted to agree  
8 very much with Commissioner Kennedy in her explanation.  
9 We didn't talk about it but the record reflects that  
10 there would be a thousand jobs created by this project  
11 if it were built out fully. And that's why it was so  
12 frustrating to me when I learned that Lockheed Martin  
13 had walked away from the project. It was really in a  
14 way heartbreaking. And I certainly wish Starwood the  
15 best in finding a replacement partner for that company.

16 You know, it is interesting. It just highlights  
17 the fact that the challenge right now for these solar  
18 projects, which we are all so much in favor of, is not  
19 regulation. I mean we are getting our job done. We  
20 are, we are fulfilling our side of the bargain and the  
21 obligation and the duty, the Line Siting Committee is  
22 working wonderfully, the Commission is approving  
23 projects, but, rather, the financing. And, you know,  
24 the financial community, the banks, the equity partners,  
25 tax equity partners really need to come back into this

1 space and step up to the plate. So that's what needs to  
2 happen for these projects to be built.

3 I wanted to thank the Line Siting Committee  
4 again for very, very good questions. I thought the  
5 record was very complete. We didn't even get to talk  
6 about the waterfowl issue, which was also addressed.  
7 Every time you think you have seen it all, there is  
8 another issue that gets addressed in one of these cases.  
9 So that's great. And it shows again that we are very  
10 sensitive to the Arizona Game & Fish Department.

11 And I keep thinking to myself, just as an aside,  
12 why do we not have them on the Line Siting Committee.  
13 They were, I think, at one point and they are not  
14 anymore. And they really should be on the Committee.  
15 But they are very much a participant in these cases.  
16 And I appreciate that. And we will address dry cooling  
17 going forward no doubt.

18 So I vote aye.

19 By your vote of five ayes and zero nays you have  
20 passed U-6.

21 (TIME NOTED: 2:57 p.m.)

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1 STATE OF ARIZONA     )  
                                  ) ss.  
2 COUNTY OF MARICOPA )  
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7                   I, COLETTE E. ROSS, Certified Reporter No.  
8 50658 for the State of Arizona, do hereby certify that  
9 the foregoing printed pages constitute a full, true and  
10 accurate transcript of the proceedings had in the  
11 foregoing matter, all done to the best of my skill and  
12 ability.

13  
14                   WITNESS my hand this 21st day of December,  
15 2009.

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